Preppers Guide to Streptococcus

General info: Strep is a common bacterial infection caused mainly by Streptococcus pyogenes (Group A Strep). It often leads to strep throat, scarlet fever, and skin infections. Lab studies show certain natural compounds can fight this specific bacteria, but they are not cures.

Symptoms: Starts suddenly w/ sore throat, pain when swallowing, fever, swollen red tonsils (sometimes w/ white spots), swollen neck glands, headache. Kids may have stomach ache or vomiting.

Treatment: Doctors typically prescribe penicillin or amoxicillin antibiotics taken for a full 10 days.

- **Penicillin allergy meds:** If allergic to penicillin, options include cephalexin or cefadroxil (for milder allergies) or clindamycin, azithromycin, or clarithromycin (for stronger allergies). Courses last 5–10 days depending on the medicine.

Complications: Untreated strep can lead to serious issues like rheumatic fever (which can damage the heart), kidney problems, abscesses in the throat, scarlet fever, or even life-threatening invasive infections.

Prevention: Wash hands often, avoid sharing drinks or close contact with sick people, finish any prescribed antibiotics, and keep your vitamin D levels healthy to support your immune system.

Essential Oils (Tested in Lab Against S. pyogenes)

- **Most effective:** Cinnamon bark oil stands out as the strongest, stopping bacterial growth at very low concentrations. Oregano (rich in carvacrol), thyme (rich in thymol), lemongrass, clove (eugenol), and sage also perform very well in lab tests.
- **Promising:** Winter savory, peppermint, and eucalyptus show solid activity. These oils (along with the stronger ones above) work well together in diffuser blends, steam inhalation, or diluted throat sprays for supportive relief.
- **Source:** https://pubmed.ncbi.nlm.nih.gov/ (key 2013 study on 18 essential oils)

Other Natural Options (Primarily Lab-Tested Against S. pyogenes)

- **Colloidal silver:** Certain 18–20 ppm ionic silver solutions can slow or stop strep growth in lab tests. Human evidence is limited, so use cautiously and not as a replacement for antibiotics.
- **Quercetin:** This natural plant compound (found in capers, onions, apples, etc.) can damage strep cell walls, reduce biofilms, and work together with some antibiotics in lab studies.
- **Manuka honey:** Special honey from New Zealand stops strep from forming sticky biofilms, kills bacteria inside them, and lowers the bacteria's ability to stick to tissues. It's often used for soothing sore throats. **Source:** https://pubmed.ncbi.nlm.nih.gov/
- **Garlic (allicin):** Fresh garlic extracts and the compound allicin can inhibit strep growth and block harmful toxins the bacteria produce. It shows good antibacterial activity in lab settings.
- **Ginger:** Ginger extracts (especially fresh) have shown ability to slow down or inhibit S. pyogenes growth in several lab studies, though results vary by preparation.
- **Turmeric (curcumin):** The active compound in turmeric can slow down or stop strep bacteria from growing in lab tests. It also helps reduce the protective biofilms that the bacteria build.
- **Vitamin D:** Low levels are linked to frequent & severe strep infections. It helps your immune system produce germ-fighting substances, maintaining good levels may help prevent illness.

Sources for key items:

- **Cinnamon/EOs study:** https://pmc.ncbi.nlm.nih.gov/articles/PMC3638616/
- **Manuka honey:** https://pubmed.ncbi.nlm.nih.gov/22294681/
- **Vitamin D review:** https://pmc.ncbi.nlm.nih.gov/articles/PMC7852033/